able to go about, not, however, without the aid of a stick, but he feels the limb much stronger, and wears an elastic support to the joint.

"The line of treatment here recorded has been seldom practised in this city, because I consider the cases in which it would be justified are very rare. In general, by perseverance and attention, and more or less frequent changes in the plans of treatment, we at length succeed in causing the absorption of the fluid in such cases as that above recorded; but in the present instance I thought myself justified in resorting to this extreme measure, as the disease had existed for such a long time, was not influenced by any treatment, and the joint had been evidently much altered from the normal structure, and the secreting sac much deformed from ordinary synovial membrane.

"I resorted to the operation not without some fear and anxiety, but I was very soon satisfied as to the propriety of it by the absence of any bad symptoms, and was the more encouraged to repeat the injection till it induced some decided alteration in the disease.

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29. *Excision of the Knee-joint.* Dr. EBEN WATSON, in an interesting paper (*Glasgow Medical Journal*, Oct. 1859), states that excision of the knee-joint has been performed eleven times in Glasgow on the living subject. Of these cases only *four* have been successful, and *seven* have been failures. Of these seven patients four died from the effects of the operation; three were submitted to amputation through the thigh, and one of them survived. So that of the eleven patients operated upon, *six* died.

These results may be also expressed as follows:—

Cases of excision, 11	Total recoveries, 5	Cures, with useful limbs,	4
		Cure after secondary amputation,	1
	Total deaths, 6	After excision,	4
		After secondary amputation,	2

or perhaps still more clearly, though somewhat differently, in the following table:—

Number of excisions.	Cases of secondary amputation.	Cures, with useful limbs.	Total recoveries.	Total deaths.
11	3	4	5	6

Mr. Butcher, in his papers on this subject in the *Dublin Journal of Medical Science* (Vols. xix. and xxv., and No. 53), gives, *from many sources*, cases to the number of 83; of these there were 58 cures, and 15 deaths, and 6 successful secondary amputations. One of the 15 deaths was after amputation, and three of the 83 cases disappear from the account, I rather think, because they were too recently operated on to be stated with the others. His account, then, is as follows:—

Number of excisions.	Secondary amputations.	Cures, with useful limbs.	Total recoveries.	Total deaths.
80	7	59	65	15

This is, of course, much more favourable for excision than the former table; but even when the results are combined, the number of deaths is small compared with that of the recoveries. Thus—

Cases.	Total recoveries.	Total deaths.	Secondary amputations.	Cures, with useful limbs.
91	70	21	10	63

These figures show most favourably for the operation of excision, both as to the smallness of the mortality, and as to the satisfactory nature of the result, in no fewer than 63 out of 91 cases; viz., that the patient retained his two limbs, and was not condemned to hop about for life on one.

The mortality after amputation through the thigh *for disease* is, it must be confessed, higher than that just given for excision of the knee-joint. In the Royal Infirmary of Glasgow, between 1842 and 1857 inclusive, there were performed 128 secondary amputations through the thigh; of that number, 65 patients died, and 63 recovered. About one in two died. But I have not separated the cases of amputation for disease from those for accident in this statement. Now the latter class of cases, viz., secondary amputations of the thigh for accidents, almost all die; but they are not distinguished in the operation-table of the hospital; and, therefore, I could not do so without very great labour, The proportion of deaths given above is, for that reason, greater than if the amputations had all been for disease. I would guess the true percentage at 40 or thereabout.

Now there were only 21 deaths in 91 cases of excision of the knee-joint; and that is 23.07 per cent., or nearly one-third less than the proportion of deaths after amputation through the thigh for disease. It ought to be remembered, too, that these 91 cases were operated on and treated in many different ways, and above all that their diseases and constitutions were different. It is quite possible, therefore, that in future, by a better selection of cases, and a more skilful choice of the precise manner of operating, the mortality may be still further diminished. At all events, it will not do for surgeons any longer to ignore this contrast of results; and, however great their prejudice, however plausible their arguments against the operation of excision of the knee-joint, they must bend to stubborn facts and reconsider their opinions.

Dr. Watson states that he has lately operated by a single straight incision drawn right across from the one side to the other of the knee. Its middle corresponds with the middle of the patella, which I cut out, and open the joint. This is a much smaller wound than that occasioned by either of the other two modes of operating; and it is quite sufficient for the purpose required, namely, of fairly exposing the articular ends of the bones.

In cutting the bones, Dr. W. uses Graham's saw, and slants its blade so as to cut the end of the former convex, and thus save its length while he removes its entire surface. Again, he cut the head of the tibia, so as to make a concavity into which the convex end of the femur fits.

Any of the morbid structures which have not previously been removed, should now be cut off; and finally, the knife should be drawn downwards at each extremity of the wound, so as to facilitate the escape of the discharge. The limb in most cases may now be straightened, and a few wire sutures inserted in the front of the incision. No bloodvessels of importance are cut in the performance of this operation, so that ligatures are seldom required, and almost no blood is lost.

One other point of importance belonging to the operation, has occasioned some difference of opinion among surgeons; and that is, whether or not the hamstring tendons should be cut, when from long disease they have become contracted, or whether they should be gradually extended afterwards. Now, our experience at the Royal Infirmary shows, that the latter process gives far too much pain, and interferes too importantly with the granulation of the wound, to be received as the proper practice. In Case VIII., the worst consequences were attributed by the attending surgeons to the adoption of this proceeding. On the other hand, the cutting of these tendons, already exposed at each side of the wound, could not do any harm, but, on the contrary, would make the future management of the limb a matter of comparative ease to both patient and surgeon.

30. *Scooping of Bone substituted for Resection or Amputation.*—M. Sédillot, of Strasburg, has for the last two years seized every opportunity, in cases of diseased bone, of scooping out the affected parts, and leaving the cortical portions, rather than have recourse to resection or amputation. In April, 1858, he brought this mode of operating before the Academy of Sciences of Paris, and then stated that he was led to adopt the method from observing the remarkable